CLAIMS

All claims have been presented whether or not an amendment has been made. The claims have been amended as follows:

1. **(Canceled)**

2. **(Currently Amended)** The system of claim 27 ~~claim 1~~, wherein the diagnostic tool uses the first and the second thread control messages ~~copies~~ to generate diagnostic messages.

3. **(Original)** The system of claim 2, wherein the diagnostic messages show the threads' execution order.

4. **(Original)** The system of claim 2, wherein the diagnostic messages show all messages generated by the threads.

5. **(Canceled)**

6. **(Original)** The system of claim 2, wherein the diagnostic messages trigger new events to be performed.

7. **(Currently Amended)** The system of claim 2, wherein the diagnostic tool is operable to identify a source of each of the first and the second thread control messages ~~identifies the threads' source~~.

8. **(Currently Amended)** The system of claim 2, wherein the diagnostic tool is operable to truncate any message that exceeds a predetermined size ~~truncates threads exceeding a predetermined size~~.

9. **(Currently Amended)** A method, comprising:

intercepting a thread control message being communicated ~~threads passed~~ from a first PTE to a second PTE, the second PTE comprising a thread and operable to initiate an execution of the thread in response to receiving the thread control message ~~each thread comprising a plurality of executable program fragments~~;

copying the intercepted thread control message ~~threads~~;

transmitting a copy of the intercepted thread control message to a diagnostic tool of a third PTE;

generating a diagnostic message by the diagnostic tool based at least in part on the copy of the intercepted thread control message ~~a PTE Tool~~; and

displaying the diagnostic message, wherein the diagnostic message indicates the thread's execution order ~~shows the threads' execution order~~.

10. **(Currently Amended)** The method as in claim 9, wherein the diagnostic message shows all messages generated by the thread ~~threads~~.

11. **(Canceled)**

12. **(Original)** The method as in claim 9, wherein the diagnostic message triggers new events to be performed.

13. **(Currently Amended)** The method as in claim 9, wherein the diagnostic tool is operable to identify a source of the thread control message ~~identifies the threads' sources~~.

14. **(Currently Amended)** The method as in claim 9, wherein the diagnostic tool is operable to truncate any message that exceeds a predetermined size ~~truncates the threads exceeding a predetermined size~~.

15. **(Currently Amended)** A system, comprising:

means for intercepting a thread control message ~~threads~~ passed from a first PTE to a second PTE, the second PTE comprising a thread and operable to initiate an execution of the thread in response to receiving the thread control message ~~each thread comprising a plurality of executable program fragments~~;

means for copying the intercepted thread control message ~~threads~~;

means for transmitting a copy of the intercepted thread control message to a diagnostic tool of a third PTE;

means for generating a diagnostic message by the diagnostic tool based at least in part on the copy of the intercepted thread control message ~~a PTE Tool~~; and

means for displaying the diagnostic message, wherein the diagnostic message indicates the thread's execution order ~~shows the threads' execution order~~.

16. **(Currently Amended)** The system of claim 15, wherein the diagnostic message shows all messages generated by the thread ~~threads~~.

17. **(Canceled)**

18. **(Original)** The system of claim 15, wherein the diagnostic message triggers new events to be performed.

19. **(Currently Amended)** The system of claim 15, wherein the diagnostic tool is operable to identify a source of the thread control message ~~identifies the threads' sources~~.

20. **(Currently Amended)** The system of claim 15, wherein the diagnostic tool is operable to truncate any message that exceeds a predetermined size ~~truncates the threads exceeding a predetermined size~~.

21. **(Currently Amended)** An apparatus, comprising:

~~A computer-readable~~ a computer-readable medium having stored thereon a plurality of instructions, said plurality of instructions when executed by a computer, cause said computer to perform:

intercepting a thread control message ~~threads~~ passed from a first PTE to a second PTE, the second PTE comprising a thread and operable to initiate an execution of the thread in response to receiving the thread control message ~~each thread comprising a plurality of executable program fragments~~;

copying the intercepted thread control message ~~the threads~~;

transmitting a copy of the intercepted thread control message to a diagnostic tool of a third PTE;

generating a diagnostic message by the diagnostic tool based at least in part on the copy of the intercepted thread control message ~~a PTE Tool~~; and

displaying the diagnostic message, wherein the diagnostic message indicates the thread's execution order ~~shows the threads' execution order~~.

22. **(Currently Amended)** The apparatus ~~computer-readable medium~~ of claim 21, wherein the diagnostic message shows all messages generated by the thread ~~threads~~.

23. **(Canceled)**

24. **(Currently Amended)** The apparatus ~~computer-readable medium~~ of claim 21, wherein the diagnostic message triggers new events to be performed.

25. **(Currently Amended)** The apparatus ~~computer-readable medium~~ of claim 21, wherein the diagnostic tool is operable to identify a source of the thread control message ~~identifies the threads' sources~~.

26. **(Currently Amended)** The apparatus ~~computer-readable medium~~ of claim 21, wherein the diagnostic tool is operable to truncate any message that exceeds a predetermined size ~~truncates the threads exceeding a predetermined size~~.

27. **(New)** A system, comprising:

a first portable thread environment (PTE) comprising a first thread, the first PTE operable to execute the first thread and to communicate a thread control message; and

a router operable to receive the thread control message from the first PTE and to route the received thread control message to both a second PTE comprising a second thread and a third PTE comprising a diagnostic tool, the second PTE operable to initiate execution of the second thread in response to receiving the thread control message.

28. **(New)** The system of Claim 27, wherein the first PTE is operable to communicate a thread control message after executing the first thread.

29. **(New)** The system of Claim 27, wherein the thread control message comprises a destination address identifying the second thread.